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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,376	10/30/2003	Christopher E. Schafer	993819-8	7890
7590 09/30/2005			EXAMINER	
G. Brian Pingel Brown, Winick, et al Suite 277 Regency West 5, 4500 Westown Parkway West Des Moines, IA 50266			PRICE, CRAIG JAMES	
			ART UNIT	PAPER NUMBER
			3753	

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/697,376	SCHAFFER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Craig Price	3753	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 October 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/30/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

I – As to claim 8, line 2, it is unclear by what is meant by the claimed limitation, “the upper tubular portion is adjustable”. Further, it is unclear as to how the “upper tubular portion is adjustable”. Please clarify.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5,7-10,12 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Galetschky (US 1,813,285).

Regarding claims 1 and 10, Galetschky discloses an apparatus for retaining fluid in a liquid delivery tube (col.1, ll.1-9) comprising of, a lower portion (1) having a ball valve (9) that permits only unidirectional flow of fluids and includes a valve chamber (internal to 1) for housing a ball and having an inlet end (near 3) and an outlet end (near 11) being spaced apart sufficiently so that the ball is longitudinally, reciprocally movable

Art Unit: 3753

within the chamber from a closed position at the inlet end of the chamber to an open position at the outlet end of the chamber, and an upper tubular portion (7) that has an outside diameter that is tapered so that it can be inserted into a liquid delivery tube (8), the tubular portion having an elongated, tapered passageway that communicates with the outlet end of the valve chamber to convey fluid from the chamber to the tube.

Regarding claim 2, Galetschky shows in Figure 2, at least one interior rib (11) extends inward from an inside upper portion of the outlet of the valve chamber so that the ball cannot significantly obstruct the flow of fluids through the outlet of the valve chamber.

Regarding claim 3, Galetschky shows in Figure 2, the inside upper portion of the valve chamber includes a plurality of the interior ribs (11) that are circumferentially spaced apart.

Regarding claim 4, Galetschky shows the plurality of the interior ribs are longitudinally aligned, as shown in Figure 2.

Regarding claim 5, Galetschky depicts the valve chamber inlet end includes a valve seat (2) having sidewalls that taper inwardly such that the diameter of the valve seat is reduced toward the valve chamber inlet end to prevent the ball from becoming stuck therein, as shown in Figure 3.

Regarding claim 7, Galetschky shows the diameter of the passageway of the upper tubular portion tapers inwardly (6) so that the flow of fluid through the upper tubular portion is restricted as seen in Figures 2 and 3.

Art Unit: 3753

Regarding claim 8, Galetschky discloses the diameter (7) of the upper passageway of the upper tubular portion is adjustable (Col 1 ll. 48 –50 onto Col. 2, ll. 51-55), for this claimed limitation, adjustable is being considered as adaptable.

Regarding claim 9, Galetschky shows the upper tubular portion can be inserted into the bottom of the liquid delivery tube, as seen in Figure 1.

Regarding claim 12, Galetschky discloses the spacing between the inlet end and the outlet end of the valve chamber is of a sufficient length so that as the ball moves from the open position to the closed position, a portion of the liquid in the delivery tube is permitted to pass back through the apparatus to reduce the amount of liquid in the tube (col. 2, ll. 63-72).

Regarding claim 13, Galetschky shows liquid delivery tube is in the form of a straw (8) having an upper end for delivering fluid to the mouth of a user and a bottom end to which the apparatus is attached, as seen in Figure 1.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

Art Unit: 3753

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Galetschky (US 1,813,285).

Galetschky has taught all of the features of the claimed invention except that, the valve seat sidewalls tapering inwardly at an angle less than 20.76 but greater than 14.76 degrees.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to have the inwardly tapered sidewalls of Galetschky to be at an angle less than 20.76 but greater than 14.76 degrees, because Applicant has not disclosed that, the inwardly tapered sidewalls at an angle less than 20.76 but greater than 14.76 degrees provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with Galetschky's inwardly tapered sidewalls, because the inwardly tapered sidewalls of Galetschky provides a sealing surface for the ball that prevents the liquid from returning to the glass.

Therefore, it would have been an obvious matter of design choice to modify the inwardly tapered sidewalls of Galetschky to obtain the invention as specified in claim 6.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Galetschky (US 1,813,285).

Art Unit: 3753

Regarding claim 11, Galetschky discloses an apparatus for retaining fluid in a liquid delivery tube (col.1, ll.1-9) comprising of, a lower portion (1) having a ball valve (9) that permits only unidirectional flow of fluids and includes a valve chamber (internal to 1) for housing a ball and having an inlet end (near 3) and an outlet end (near 11) being spaced apart sufficiently so that the ball is longitudinally, reciprocally movable within the chamber from a closed position at the inlet end of the chamber to an open position at the outlet end of the chamber, and an upper tubular portion (7) that has an outside diameter that is tapered so that it can be inserted into a liquid delivery tube (8), the tubular portion having an elongated, tapered passageway that communicates with the outlet end of the valve chamber to convey fluid from the chamber to the tube.

Galetschky has taught all of the features of the claimed invention except that, the valve seat sidewalls tapering inwardly at an angle less than generally 21 but greater than generally 15 degrees.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to have the inwardly tapered sidewalls of Galetschky to be at an angle less than generally 21 but greater than generally 15 degrees, because Applicant has not disclosed that, the inwardly tapered sidewalls at an angle less than generally 21 but greater than generally 15 degrees provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with Galetschky's inwardly tapered sidewalls, because the

Art Unit: 3753

inwardly tapered sidewalls of Galetschky provides a sealing surface for the ball that prevents the liquid from returning to the glass.

Therefore, it would have been an obvious matter of design choice to modify the inwardly tapered sidewalls of Galetschky to obtain the invention as specified in claim 11.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gamblin Jr. (US 3,438,527), Wright (US 3,773,256), Newton (US 185,694), Walton (US 4,142,645), Tatum (US 334,059), Tatum (US 342,478), Felver (US 2,692,751), Burt (US 1,906,312), Nelson and Mathers (US 899,462), Lerner et al. (US 2,855,127), Westra et al. (US 4,945,947), and Paczonay (US 6,273, 128) all show similar types of check valves.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Price whose telephone number is (571) 272-2712. The examiner can normally be reached on 8AM - 5PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frederick Nicolas can be reached on (571) 272-4931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 3753

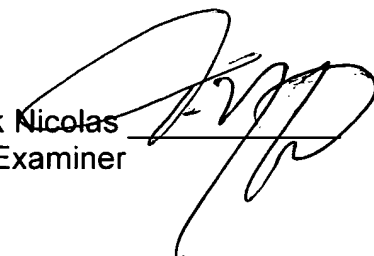
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September 28, 2005

Craig Price  
Examiner  
Art Unit 3753



Frederick Nicolas  
Primary Examiner



9/28/05